REMARKS

This amendment is in response to the Official Action mailed August 13, 2003. In the present paper, formal drawings and a Letter to the Official Draftsperson are enclosed.

Claims 1 and 37 have been amended to contain the limitations of claims 19-22, and claims 19-22 have been cancelled. The dependency of claim 23 has been changed from a cancelled claim to claim 1. Claim 28 has been amended to correct a minor typographical error. Claims 1-18 and 23-40 are now presented for the Examiner's consideration in view of the following remarks:

The Present Application

The present application is directed to a system and method for modifying the operation of a personal communication device in a vehicle. A large number of states have passed regulations governing the use of cell phones in vehicles. The present invention provides a technique for enforcing compliance, or for reminding cell phone users of the law as those users enter new jurisdictions. In general, the method of the invention involves determining the location of the cell phone, assessing the laws governing that jurisdiction, and deducing whether there are any restrictions imposed on cell phone use. In various embodiments, the cell phone user may be reminded of the restrictions, or the restrictions may be enforced by, for example, refusing service on the cell phone.

Independent claim 1 of the present application has been amended to incorporate the limitations of dependent claims 19-22, which have been cancelled. Amended claim 1 is directed to a method for controlling the use of a wireless personal communications device in a vehicle. The device is for communicating with at least one fixed-location communications node of a

terrestrial communications network having a plurality of communications nodes. The method includes the initial step of deriving information relating to the geographic location of the personal communications device by receiving location information from at least one of the communications nodes. That fixed-location communications node is a short-range transmitter transmitting message information identifying the location of said fixed-location communications node.

The method claimed in amended claim 1 further includes the steps of deriving information relating to restrictions on the use of personal communications devices in each of a plurality of geographic regions, determining whether the geographic location of the personal communications device bears a predetermined relationship to at least one of said geographic regions, and determining restrictions on use of the personal communications device while the predetermined relationship exists.

The method of amended claim 1 is an important advance over the prior art because it permits controlling the use of a cell phone or other device in a vehicle according to local law, without depending on the GPS system for determining location. The GPS system, while extremely accurate, suffers from several disadvantages such as degraded functionality in areas with cliffs and large buildings that may reflect the signal, and dense foliage and bad weather that may block the signal. Further, the GPS system is a U.S. military system and is used for that purpose. While intentionally introduced position errors were removed several years ago, there is no guarantee against their reinstatement. By instead receiving position information from a stationary short range transmitter, a low-cost substitute for the GPS system is used in the method of claim 1.

Independent claim 28 of the present application is directed to a method for controlling the

use of at least one personal communications device in a vehicle. The method includes the steps of, at a controller in the vehicle, deriving information relating to the geographic location of the vehicle, and, at the controller in the vehicle, deriving information relating to restrictions on the use of personal communications devices in at least one geographic region. The method also includes, at the controller in the vehicle, determining whether the geographic location of the vehicle bears a predetermined relationship to at least one of the geographic regions, and transmitting a message from the controller in the vehicle to the at least one personal communications device imposing restrictions on use of each of the personal communications devices while the predetermined relationship exists.

The method of claim 28 utilizes a controller in the vehicle. By doing so, much of the functionality necessary for performing the method of the invention is shifted to the vehicle, reducing the functional requirements of the portable communications device. That is important in cases where the weight and expense of the communications device are an issue. Further, some functionality, such as a GPS positioning system, may already be included in the vehicle design. Finally, additional input from the vehicle itself, such as vehicle speed and the use of a reverse gear, are available to an in-vehicle system. A complete discussion of that system may be found in the present specification at page 18, line 23 – page 21, line 21.

Independent claim 37 has been amended to include the same added limitation as amended claim 1; i.e., information relating to the geographic location of the communications device is received as a message identifying the location of a short-range transmitter. As noted, that provides an inexpensive means for determining location without depending on the GPS system.

The Examiner has rejected claims 1-40 of the present application as obvious over various combinations of art. Specifically, claims 1-5, 8, 12-21, 23-30, 33, 36 and 37 are rejected under

35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,778,304 to Gruber et al. (Gruber) in view of U.S. Patent Application Publication No. 2002/0107032 to Agness et al. (Agness). Claims 6, 7, 9-11, 31, 32, 34, 35 and 38-40 are rejected over those references further in view of U.S. Patent No. 6,470,447 to Lanbert et al. Claim 22 is rejected over Grube and Agness and further in view of U.S. Patent Application Publication No. 2001/0031631 to Pitts (Pitts).

The Grube *Patent*

Grube discloses a method for providing communications services based on geographic location. A communications resource controller receives a location of and service request from a particular communication unit. The controller then determines whether that request is restricted and, if so, denies that request.

As noted by the Examiner, the Grube patent makes no mention of using a communication device in a vehicle. Instead, Grube is directed to instances where cell phone use is typically restricted in a building, such as a hospital (Grube, col. 1, lines 45-55).

Grube teaches determining the location coordinates of the communications device using a GPS receiver located within the device (Grube, col. 3, lines 11-13). No other means for determining a location of a communications device is taught.

The Agness *Application*

Agness teaches inhibiting communication via cell phone when the phone is in a geographic area where restrictions apply. To determine a position of the cell phone, Agness incorporates a "high resolution GPS circuit." Agness states that

> The NAVSTAR GPS signals available for civilian uses have been partially encrypted to provide an accuracy of about a 20 to 60 foot radius. This error (accuracy) is not acceptable for the present invention.

Agness, para. [0054]. Agness therefore teaches away from the use of a civilian GPS system for providing position information. Agness instead teaches using a "high resolution GPS system":

> The high resolution GPS circuit 45, therefore contains a WAAS (wide-area augmentation system) circuit such as available in the marketplace from Raytheon Systems, Inc, Lexington, Mass. This circuit provides WAAS differential GPS service. WAAS utilizes ground stations that compare satellite GPS signal position readouts to each station's known position. The ground stations provide a differential correction signal as a function of location from each ground station.

Agness, para. [0055].

The high definition GPS circuit 45 of Agness is connected directly to the cell phone PC board 43, and is included in the cell phone (Agness, paras. [0018], [0052]; FIG. 2).

The Pitts *Application*

Pitts teaches the use of a short-range base station to control the use of mobile communications devices in a limited area, such as a courtroom. The use of a communications device in a vehicle is not contemplated by Pitts. Further, the short-range base station of Pitts does not transmit message information identifying a location of the base station. Instead, the short-range station simply controls all mobile communications within its range (Pitts, para. [0044]).

Discussion

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. M.P.E.P. § 2143.03 (*citing In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

Applicant respectfully submits that in the present case, the Examiner has not established a *prima facie* case of obviousness because the combination made by the Examiner fails to teach several of the claim limitations.

As to claim 1, as amended, applicant submits that neither Grube nor Agness nor Pitts teaches "a short-range transmitter transmitting message information identifying the location of said fixed-location communications node." That limitation was incorporated into claim 1 from claim 22. In rejecting claim 22, the Examiner cites the pico-station of Pitts disclosed at para. [0045].

Pitts discloses, at [0045], the pico-station querying the call phone as to whether the phone is equipped for silent communication. Pitts does not, however, disclose transmitting a location to the phone, as required by amended claim 1.

In the present system as claimed in claim 1, the location of the communications device that is transmitted to the device is used in determining whether there are restrictions on the use of the communications device. If, in the present system, all that was transmitted to the communications device was information about whether the phone was equipped for silent communication, the claimed determination on restrictions would not be possible.

Applicant therefore submits that claim 1, and those claims depending from claim 1, are patentable at least for the above reasons.

As to claim 28, Applicant respectfully submits that neither Grube nor Agness discloses the use of a controller in a vehicle in the respective described systems.

The Examiner cites Grube as disclosing the four steps of the method of claim 28 that are to be performed "at a controller in the vehicle." Applicant notes that Grube fails to make any disclosure of a vehicle, and certainly does not disclose a controller in a vehicle that performs any steps.

The Examiner cites Agness at [0038] for the use of a portable communications device in a vehicle. That passage discusses a communications device that is "installed in a vehicle." In that passage, however, Agness is referring to the temporary connection of a cell phone with a hands-free adapter and a preprogrammed dialer circuit ("when installed in a vehicle"). The functions of the cell phone inhibiting system of Agness are all performed by the cell phone 13 and a cell base station communications server 33 (FIG. 1). They are not controlled by any component of the vehicle.

The Examiner may argue that, because the cell phone is "in the vehicle", a controller in the cell phone would be a "controller in said vehicle." Applicant submits, however, that the "controller in the vehicle" of claim 28 must be separate from the cell phone, because in the last step of claim 28, a message is transmitted

> from said controller in said vehicle to said at least one personal communications device.

That step could only be performed if the controller in the vehicle were different from the communications device.

Applicant therefore respectfully submits that no reference of record or combination of such references teaches the four steps of claim 28 performed by a "controller in said vehicle," as required in each recited step of that claim.

Applicant furthermore submits that no reference of record teaches

> transmitting a message from said controller in said vehicle to said at least one personal communications device imposing restrictions on use of each said personal communications device while said predetermined relationship exists.

In fact, no reference teaches transmitting any message from any device in the vehicle to the communications device. For that additional reason, claim 28 is patentable over the cited references. Applicant further submits that claims 29-36, which depend from claim 28 are patentable for at least the same reasons.

As to claim 37, Applicant has amended that claim to contain the same limitations discussed above with respect to claim 1, and submits that claim 37, and those claims depending from claim 37, and patentable for the same reasons as claim 1.

Conclusion

Because the cited references do not teach all the elements contained in the amended claims, Applicant submits that none of the claims is obvious over the combinations made by the Examiner.

Applicant therefore submits that none of the claims presented in the case is obvious over the relevant art, and asserts that claims 1-18 and 23-40 are now in condition for allowance. Applicant earnestly requests that the Examiner issue a Notice of Allowance.

Should the Examiner have any questions regarding the present case, the Examiner should not hesitate to contact the undersigned at the number provided below.

Respectfully,

By 

Robert T. Canavan
Reg. No. 37,592
Telephone: 908-707-1568

Canavan & Monka LLC
805 Partridge Drive
Bridgewater, NJ 08807

Date: 12/9/03